

HALF-RAIL DIFFERENTIAL DRIVER CIRCUIT

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ABSTRACT OF THE DISCLOSURE

A half-rail differential driver circuit comprises a differential line pair, a high line and a low line,
10 that are charged to half a first supply voltage, typically VDD, by shorting the high output line to the low output line during the pre-charge phase. The half-rail data lines are then pulled up or down during the evaluation phase. Since, according to the present
15 invention, the switching differentials are only half-rail, the coupling capacitance is reduced by half. In addition, since according to the invention, the half-rail differential driver circuit employs a differential line pair, the return path is confined within the
20 differential line pair, virtually eliminating the loop area and therefore virtually eliminating inductive coupling.

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